

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-2. (Canceled)
3. (Currently Amended) The method of claim [[2]] 30, further comprising:
forwarding to said transport network only the received plurality of content presently requested by any subscriber.
4. (Currently Amended) The method of claim [[2]] 30, further comprising:
storing, in said server, the plurality of content presently requested by a threshold number of subscribers.
5. (Currently Amended) The method of claim [[2]] 30, wherein said storing of the desired plurality of content comprises storing a temporally sub-sampled version of the desired plurality of content to generate a fast-forward track.
6. (Currently Amended) The method of claim [[2]] 30, wherein said storing of said desired plurality of content comprises storing a temporally sub-sampled version of the desired plurality of content in reverse order to generate a reverse track.
7. (Currently Amended) The method of claim [[2]] 30, wherein said storing of said desired plurality of content comprises storing a version of the desired plurality of content to generate a play track.
8. (Currently Amended) The method of claim [[2]] 30, further comprising, storing selected plurality of content during a predetermined time interval of a broadcast schedule.
9. (Currently Amended) The method of claim [[2]] 30, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift interactive programming guide screen.

10. (Currently Amended) The method of claim [[2]] 30, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift navigation screen.

11. (Currently Amended) The method of claim [[2]] 30, wherein said subscriber request for temporally shifted content is initiated by receiving a pause or rewind subscriber selection while broadcasting of said desired plurality of content.

12. (Canceled)

13. (Currently Amended) The method of claim [[12]] 31, further comprising:
providing a navigator list to said subscribers having screens presenting said selected content for viewing and selection,

wherein in an alternate mode of operation, streaming, on-demand, said selected content via said navigator list, such that said subscribers may interactively activate such selected content during viewership of previously scheduled broadcast programs selected from said navigator list.

14. (Previously Presented) The method of claim 13, wherein said subscribers may interactively switch between said first mode and said alternate mode of operation.

15. (Currently Amended) The method of claim [[12]] 31, wherein said selecting step comprises:

monitoring subscriber viewership; and
selecting those broadcast programs having a viewership exceeding a predetermined metric.

16. (Currently Amended) The method of claim [[12]] 31, wherein said selecting step further comprises:

generating title plans for identifying content to be temporally adjusted; and
defining a temporal availability window for each program.

17. (Previously Presented) The method of claim 16, wherein said processing step comprises:

generating real-time encoded play tracks, fast-forward tracks, rewind tracks, and entry point data (EPD) files associated with each track, said fast-forward tracks and rewind tracks forming temporally adjusted content.

18. (Previously Presented) The method of claim 17, wherein said processing step further comprises:

encoding said content identified in said title plan to form said temporally adjusted content; and

buffering said encoded content.

19. (Previously Presented) The method of claim 18, wherein said processing step further comprises:

receiving packetized transport streams from at least one encoder; and

inserting title identification codes (TICS) to each packet to enable said transport streams to be identified as said real-time encoded play tracks, fast-forward tracks, and rewind tracks.

20. (Previously Presented) The method of claim 19, further comprising:
generating said EPD files as said fast-forward and rewind tracks are being created.

21. (Previously Presented) The method of claim 20, wherein said EPD files provide transition between streaming of the Play, fast-forward and rewind tracks at appropriate points in response to user commands.

22-24. (Canceled)

25. (Currently Amended) The method of claim [[12]] 31, wherein said first mode of operation further comprises providing an interactive program guide (IPG) to said subscribers having screens presenting said selected content having temporally adjusted content for viewing and selection.

26. (Canceled)

27. (Currently Amended) The method of claim [[12]] 31, wherein said first mode of operation further comprises receiving a temporal control message from a subscriber selected from the group of temporal control messages consisting of pause, rewind, and fast-forward.

28. (Canceled)

29. (New) A method, comprising:
presenting a program guide identifying titles of audiovisual data and identifying a set start time and a provided stop time for each of the identified titled audiovisual data presented in the program guide;

receiving a request for recording one of the identified titled audiovisual data selected from the program guide prior to the set start time associated with the one of the identified titled audiovisual data selected from the program guide;

determining from metadata whether the selected one of the identified titled audiovisual data has a known duration defined by the set start time and provided stop time or has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box;

when the selected one of the identified titled audiovisual data is determined from the metadata to have a known duration, allocating sufficient memory to record the selected one of the identified titled audiovisual data having a known duration;

when the selected one of the identified titled audiovisual data is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box:

receiving, at the set-top box, the selected one of the identified titled audiovisual data presented in the program guide as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data;

allocating a portion of storage space for recording a received extent of the selected one of the identified titled audiovisual data;

determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data;

when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected one of the identified titled audiovisual data;

when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory;

when the received extent is determined to be the last extent, terminating the recording of the selected one of the identified titled audiovisual data after the last extent is recorded; and

deallocating any of the allocated memory remaining after terminating the recording of the selected one of the identified titled audiovisual data.

30. (New) In a system adapted to receive broadcast content on a desired transmission channel from each of a plurality of content sources and forward said received broadcast content to a transport network for distribution to subscribers, a method comprising:

in response to a title plan generated by a time shift scheduler, wherein said title plan includes information identifying a plurality of content and designating a set start time and a provided stop time for each of the identified plurality of content,

receiving a request for recording one of the plurality of content selected from the title plan prior to the set start time associated with the selected content;

determining from metadata whether the selected content has a known duration defined by the set start time and provided stop time or has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box;

when the selected content is determined from the metadata to have a known duration, allocating sufficient memory to record the selected content having a known duration;

when the selected content is determined from the metadata to have an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box:

receiving, at the set-top box, the selected content as tracks divided into sequential extents representing sections of the selected content;

allocating a portion of storage space for recording a received extent of the selected content;

determining whether the received extent is a last extent of the selected content;

when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected content;

when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory;

when the received extent is determined to be the last extent, terminating the recording of the selected content after the last extent is recorded; and

deallocating any of the allocated memory remaining after terminating the recording of the selected content.

31. (New) A method for providing video information in an interactive information distribution system to a plurality of subscribers, comprising:

receiving a plurality of scheduled broadcast programs at the set-top box on a desired transmission channel in real-time;

selecting a portion of said broadcast programs according to a title plan generated by a time shift scheduler, wherein said title plan includes information identifying a plurality of content and designating a set start time and a provided stop time for each of the identified plurality of content, wherein at least one of said plurality of content has a known duration defined by the set start time and provided stop time and at least one of said plurality of content has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box;

processing said selected broadcast programs into temporally adjusted content, such that the temporally adjusted content is associated with said selected broadcast programs;

in response to receiving a request for recording content having an unknown duration selected from the title plan prior to the start time for the selected content having the unknown duration, storing dynamically said selected content by:

receiving, at the set-top box, the selected content having the unknown duration as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data;

allocating a portion of storage space for recording a received extent of the selected content having the unknown duration;

determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data;

when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected content having the unknown duration;

when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory;

when the received extent is determined to be the last extent, terminating the recording of the selected content having the unknown duration after the last extent is recorded;

and

deallocating any of the allocated memory remaining after terminating the recording of the selected content having the unknown duration;

broadcasting said selected content to said plurality of subscribers via said desired transmission channel; and

in a first mode of operation, associating a temporal parameter to said selected content having a variable duration extending beyond the set stop time and streaming, on-demand, said selected content having the variable duration extending beyond the set stop time and said temporal parameter to those subscribers viewing said selected content, such that said subscribers may interactively activate such selected content having a variable duration extending beyond the set stop time contemporaneously with currently broadcast programs.

32. (New) A system for providing video information in an interactive information distribution system to a plurality of subscribers, comprising:

means for receiving a plurality of scheduled broadcast programs on a desired transmission channel in real-time;

means for selecting a portion of said broadcast programs according to a title plan generated by a time shift scheduler, wherein said title plan includes information identifying a plurality of content and designating a set start time and a provided stop time for each of the identified plurality of content, wherein at least one of said plurality of content has a known duration defined by the set start time and provided stop time and at least one of said plurality of content has an unknown duration wherein the stop time is tentative and an actual stop time is not communicated to the set-top box;

means for processing said selected broadcast programs into temporally adjusted content, such that the temporally adjusted content is associated with said selected broadcast programs;

in response to receiving a request for recording content having an unknown duration selected from the title plan prior to the start time for the selected content having the unknown duration,

means for storing dynamically at the means for receiving, in response to receiving the request for recording content selected from the title plan prior to the start time for the selected content, said selected content having the unknown duration for later access by subscribers, wherein storing dynamically comprises:

receiving, at the set-top box, the selected content having the unknown duration as tracks divided into sequential extents representing sections of the selected one of the identified titled audiovisual data;

allocating a portion of storage space for recording a received extent of the selected content having the unknown duration;

determining whether the received extent is a last extent of the selected one of the identified titled audiovisual data;

when the received extent is determined not to be the last extent, determining whether a predetermined part of the allocated memory is consumed by recording the received extent of the selected content having the unknown duration;

when a predetermined part of the allocated memory is determined to be consumed, allocating a next portion of memory;

when the received extent is determined to be the last extent, terminating the recording of the selected content having the unknown duration after the last extent is recorded; and

deallocating any of the allocated memory remaining after terminating the recording of the selected content having the unknown duration;

means for broadcasting said selected content to said plurality of subscribers via said desired transmission channel; and

in a first mode of operation, means for associating a temporal parameter to said selected content having a variable duration extending beyond the set stop time and streaming, on-demand, said selected content having a variable duration extending beyond the set stop time and said temporal parameter to those subscribers viewing said selected content, such that said subscribers may interactively activate such selected content having a variable duration extending beyond the set stop time contemporaneously with currently broadcast programs.